



UNIVERSITY OF
THESSALY

DEPARTMENT OF ELECTRICAL & COMPUTER ENGINEERING
SCHOOL OF ENGINEERING
2024-2025

COURSE CODE	COURSE	SEMESTER
1. ECE119	Digital Design (Core) 6ECTS	WS
2. ECE317	Artificial Intelligence (Elective) 6ECTS	WS
3. ECE321	Concurrent Programming (Elective) 6ECTS	WS
4. ECE325	Digital Signal Processing (Elective) 6ECTS	WS
5. ECE327	Digital Systems VLSI (Elective) 6ECTS	WS
6. ECE329	Education Technologies (Elective) 6ECTS	WS
7. ECE331	Electrical Machines (Elective) 6ECTS	WS
8. ECE333	Digital Systems Lab (Elective) 6ECTS	WS
9. ECE337	Linear Programming (Elective) 6ECTS	WS
10. ECE339	Applied Statistics (Elective) 6ECTS	WS
11. ECE341	Advanced Electronics (Elective) 6ECTS	WS
12. ECE314	Electromagnetic Fields I (Elective) 6ECTS	SS
13. ECE316	Power Systems I (Core) (Elective) 6ECTS	SS
14. ECE318	Operating Systems (Elective) 6ECTS	SS
15. ECE320	Measurement Systems (Elective) 6ECTS	SS
16. ECE324	Introduction to the Theory of Computation (Elective) 6ECTS	SS
17. ECE326	Object Oriented Programming (Elective) 6ECTS	SS
18. ECE328	Information Retrieval (Elective) 6ECTS	SS
19. ECE334	Pattern Recognition (Elective) 6ECTS	SS
20. ECE338	Parallel Computer Architecture (Elective) 6ECTS	SS
21. ECE340	Embedded Systems (Elective) 6ECTS	SS
22. ECE348	Distributed Systems (Elective) 6ECTS	SS
23. ECE350	Electrotechnical Materials (Elective) 6ECTS	SS
24. ECE352	Image Processing (Elective) 6ECTS	SS
25. ECE354	Introduction to Nanoelectronics (Elective) 6ECTS	SS
26. ECE356	Special Topics/ Projects (Elective) 6ECTS	SS
27. ECE411	Power Systems II (Elective) 6ECTS	WS
28. ECE419	Logical and Functional Programming (Elective) 6ECTS	WS
29. ECE425	Testing and Verification of Digital Circuits (Elective) 6ECTS	WS
30. ECE431	CAD Algorithms (Elective) 6ECTS	WS
31. ECE437	Electrical Installations (Elective) 6ECTS	WS
32. ECE439	Special Topics/ Projects (Elective) 6ECTS	WS

33.	ECE445	Parallel and Distributing Computing (Elective) 6ECTS	WS
34.	ECE447	Neuro-Fuzzy Computing (Elective) 6ECTS	WS
35.	ECE461	Machine Learning for Data Science and Analytics (Elective) 6ECTS	WS
36.	ECE463	Telecommunications Systems II (Elective) 6ECTS	WS
37.	ECE414	Applied Stochastic Processes (Elective) 6ECTS	SS
38.	ECE416	Network Optimization (Elective) 6ECTS	SS
39.	ECE418	Blockchain Technologies and Decentralized Applications (Elective) 6ECTS	SS
40.	ECE420	Game Architecture and Development (Elective) 6ECTS	SS
41.	ECE422	Data Mining (Elective) 6ECTS	SS
42.	ECE424	Multiagent Systems (Elective) 6ECTS	SS
43.	ECE434	Complex Networks (Elective) 6ECTS	SS
44.	ECE436	Wireless Communications (Elective) 6ECTS	SS
45.	ECE444	Physical CAD Algorithms (Elective) 6ECTS	SS
46.	ECE450	Computer Networks II (Elective) 6ECTS	SS
47.	ECE456	Control and Stability of Power Systems (Elective) 6ECTS	SS
48.	ECE458	Special Topics/ Projects (Elective) 6ECTS	SS
49.	ECE460	Advanced Data Management (Elective) 6ECTS	SS
50.	ECE468	Network and Information System Security (Elective) 6ECTS	SS
51.	ECE470	Software Engineering (Elective) 6ECTS	SS
52.	ECE472	Industrial Automation and Control (Elective) 6ECTS	SS
53.	ECE474	Special Topics of Electrical Installations (Elective) 6ECTS	SS
54.	ECE480	Deep Learning and its Applications (Elective) 6ECTS	SS
55.	ECE484	Radhard Circuit Design (Elective) 6ECTS	SS
56.	ECE486	Electroacoustics (Elective) 6ECTS	SS
57.	ECE488	Design of Quantum Computers (Elective) 6ECTS	SS
58.	ECE492	Introduction to Robotics (Elective) 6ECTS	SS
59.	ECE494	Processor Design (Elective) 6ECTS	SS
60.	ECE513	Circuit Simulation Algorithms (Elective) 6ECTS	WS
61.	ECE515	Mobile and Pervasive Computing (Elective) 6ECTS	WS
62.	ECE541	Database Management Systems II (Elective) (Elective) 6ECTS	WS
63.	ECE553	Design Thinking (Elective) 6ECTS	WS
64.	ECE555	Advanced Topics in Computer Networks (Elective) 6ECTS	WS
65.	ECE557	Manufacturing of Semiconductor Devices (Elective) 6ECTS	WS
66.	ECE561	Formal Verification of Cryptosystems (Elective) 6ECTS	WS
67.	ECE563	Radar Systems and Remote Sensing (Elective) 6ECTS	WS
68.	ECE565	Special Topics/ Projects (Elective) 6ECTS	WS